

REMARKS

Claim 1 is amended to incorporate the subject matter of claim 2 and to recite that the plate has an aluminum purity of 99.28% or more. Support is found, for example, in the examples of Table 1 in the present specification. Specifically, the aluminum purity of 99.28 % is based on the following. The result of subtracting the total amount of the metal component shown in the examples of Table 1 from 100%, is 99.58 to 99.60 wt%, and further subtracting the maximum amount of unavoidable impurities (i.e., 0.3%, assuming that the unavoidable impurities exist in a maximum amount of 0.3% based on the disclosure that "if the unavoidable impurities are contained in the base metal of aluminum purity of 99.7%, the effect of the present invention is not damaged" on page 20 of the specification) results in the minimum purity of Al in the examples. That is, $99.58 - 0.3 = 99.28\%$.

Claims 2, 4, 6, 9, 13, 18 and 21 are canceled herein.

Accordingly, upon entry of the Amendment, claims 1, 3, 5, 7-8, 10-12, 14-17 and 19-20 will be all of the claims pending in the application.

I. Request for Interview

Applicants respectfully request an Interview with the Examiner to discuss the differences between the present invention and the prior art before the Examiner issues another action. The undersigned can be contacted at the telephone number below to schedule a date and time for the Interview at the Examiner's convenience.

II. Response to Obviousness-Type Double Patenting Rejection

Claims 1, 3, 5, 7-8, 10-12, 14-15 and 21 are provisionally rejected under the judicially-created doctrine of obviousness-type double patenting as allegedly being unpatentable over claims 1-14 of co-pending Application No. 10/784,879 (U.S. Publication No. 2004/0166442 A1).

Claims 1, 3, 5, 7-8, 10, 11, 12, 14, 15 and 21 are provisionally rejected under the judicially-created doctrine of obviousness-type double patenting as allegedly being unpatentable over claims 1-14 of co-pending Application No. 10/059,378 (U.S. Publication No. 2002/0155377 A1).

Claim 21 was canceled in the Amendment filed on February 1, 2006, which was entered upon filing of the RCE on March 1, 2006. Therefore the rejection of claim 21 is improper.

Claim 1 is amended to include the subject matter of claim 2, which is not included in either rejection. That is, the claims of the '879 application and the claims of the '378 application fail to teach or suggest the plate thickness t (mm) of 0.10 to 0.50 (mm) and the relation between plate thickness t (mm) and tensile strength TS (MPa) of the aluminum plate in a rolling direction as recited in amended claim 1. Claims 3, 5, 7-8, 10-12 and 14-15 depend directly, or indirectly, from claim 1 and are distinguished for at least the same reasons. Thus, the present invention is not an obvious variant of the claims of the '879 application or the claims of the '378 application.

Accordingly, Applicants respectfully request withdrawal of the obviousness-type double patenting rejections.

III. Response to Claim Rejections Under 35 U.S.C. § 102

Claims 1-16 and 21 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Nishikawa, et al (EP 211 574 A1) for the reasons of record.

Applicants respectfully traverse the rejection.

Claim 21 was canceled in the Amendment filed on February 1, 2006, which was entered upon filing of the RCE on March 1, 2006. Therefore the rejection of claim 21 is improper.

Claims 2, 4, 6, 9 and 13 are canceled herein thereby rendering the rejection as to these claims moot.

Present claim 1 recites an amount of Mg of less than 0.05%, which does not overlap with the prior art amount of 0.05 to 3%. Also, Nishikawa discloses at column 3, lines 38-40 that with Mg less than 0.05 wt%, and Si less than 0.05 wt%, the alloy plate does not have the required strength, and thus Nishikawa may be considered as teaching away from a plate having Mg of less than 0.05 wt% as in the present invention. Therefore, Nishikawa et al does not anticipate (or render obvious) present claim 1 for at least this reason.

Further, concerning the Al purity, the purity of alloy A in Table 1 of Nishikawa comprising the highest Al constituent in the examples of Nishikawa is 99.26%. In the present invention, the Al purity as shown in the example is 99.58-99.60%, and the present invention relates to JIS 1050 alloy with a high Al purity.

The Al alloy of Nishikawa is completely different from the Al alloy of the present invention. The invention of Nishikawa relates to JIS 6000 series alloy which contains a large amount of Mg, but has low Al purity.

On the other hand, in the present invention with respect to Mg, the specification describes that "unavoidable impurities contained in an aluminum alloy include, for example, Mg, Mn, Zn, Cr or the like, and these elements of 0.05 wt% or less may be each contained. For other elements than these elements, the contents conventionally known to the public may be contained" (see page 21 of the present specification). Therefore, the present specification describes that Mg is not included intentionally, which is contrary to the invention of Nishikawa where Mg is included intentionally.

The invention of Nishikawa comprises two features:

Feature 1: By adding Mg and Si as necessary constituents, they each form a solid solution or an intermetallic compound Mg_2Si phase, thus substantially improving the strength of the alloy. The specific content recited is 0.05% or more, preferably 0.2-1.5%, more preferably 0.15-0.5%, for both Si and Mg.

Feature 2: Inclusion of Zr. There are two objects for including Zr. One object is to prevent Mg_2Si mentioned in Feature 1 above from separating out in a large quantity while undergoing the final heat treatment. The other object is to substantially improve burning resistance by the existence of Zr. 0.01% or more, is recited as the required amount.

The method of allowing Mg and Si to coexist is a method used for JIS 6000 alloy, wherein the heat treatment called solution treatment is performed to improve strength (as

evidenced by p. 318 of "The Basic and Industrial Technology of Aluminum Materials" (published by Japan Institute of Light Metals, May 1, 1985 edition)).

In Nishikawa, the heat treatment at 180°C for 30 minutes after rolling described in Example 1 corresponds to the solution treatment.

Thus, the content of Mg is a necessary element to define the feature of an alloy, and the alloy of Nishikawa, which has a different Mg content from the present invention and requires Zr, differs from the alloy of the present invention. Accordingly, the Al alloy of the present invention as recited in amended claim 1 is not anticipated by Nishikawa. Claims 3, 5, 7-8, 10-12 and 14-15 depend directly, or indirectly, from claim 1 and are distinguished for at least the same reasons.

Applicants respectfully request withdrawal of the rejection.

IV. Response to Claim Rejection under 35 U.S.C. § 103

Claims 1-21 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Hotta et al (EP 1 013 469 A1) in view of Nishikawa et al.

The Examiner recognizes that Hotta et al does not specifically disclose how much of each foreign element is preferable. It is the Examiner's position that based upon the teachings of Nishikawa, it would have been obvious to one of ordinary skill in the art to use an aluminum alloy support containing 0.05 to 3% Mg, 0.05 to 0.7% Si, 0.01 to 0.25% Zr, 0.05 to 0.4% Fe and up to 0.05% Cu with a reasonable expectation of obtaining an alloy with high mechanical strength and excellent water retention.

Applicants respectfully traverse the rejection.

Claim 21 was canceled in the Amendment filed on February 1, 2006, which was entered upon filing of the RCE on March 1, 2006. Therefore the rejection of claim 21 is improper.

Claims 2, 4, 6, 9, 13 and 18 are canceled herein thereby rendering the rejection as to these claims moot.

Present claim 1 recites an amount of Mg of less than 0.05%. Nishikawa specifically teaches an Mg amount of 0.05 to 3% and actually teaches away from an amount of Mg less than 0.05%, which is recited in the present claims. As noted above, the disclosure at column 3, lines 38-40 of Nishikawa, it states, "with Mg less than 0.05 wt% . . . the alloy plate does not have the required strength". Thus, Nishikawa clearly teaches away from an amount of Mg which is within the scope of the present invention. Therefore, one of ordinary skill in the art would not have been motivated to modify or combine Hotta et al and Nishikawa, as suggested by the Examiner, with a reasonable expectation of success in achieving the presently claimed invention.

Furthermore, the JIS 6000 series alloy of Nishikawa has high strength, but it does not bend well and does not fit the plate cylinder when the printing plate is mounted on the printing press. Thus, it is generally difficult to apply this alloy to a printing plate and one would not have applied Nishikawa to Hotta.

In contrast, the alloy of the present invention uses JIS 1050 series alloy which has a normal handling ability in the printing industry. In the description of Nishikawa, there is no suggestion to provide an alloy which reduces the amount or eliminates Mg and eliminates Zr

from Nishikawa, for the purpose of sensitivity, cleaner press life, and scum resistance which are the objects of the present invention. Thus, Nishikawa clearly indicates a material different from the Al alloy of the present invention as recited in amended claim 1, and even if combined with Hotta et al, the present invention would not have been achieved. Claims 3, 5, 7-8, 10-12 and 14-15 depend directly, or indirectly, from claim 1 and are distinguished for at least the same reasons.

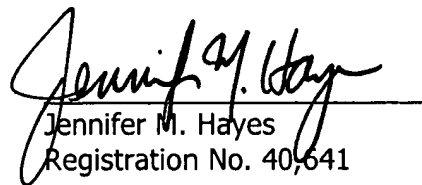
Accordingly, Applicants respectfully request withdrawal of the §103 rejection.

V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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23373

CUSTOMER NUMBER

Date: July 3, 2006